

**Blue Rock Industries
Cumberland County
Gray, Maine
A-243-71-H-R**

**) Departmental
) Findings of Fact and Order
) Air Emission License**

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Blue Rock Industries (Blue Rock) has applied to renew their Air Emission License permitting the operation of emission sources associated with their Gray, Maine Asphalt batch plant facility.

B. Emission Equipment

Blue Rock is authorized to operate the following equipment:

Asphalt Batch Plant

Equipment	Production Rate (Tons/hr)	Maximum Capacity (MMBtu/hr)	Date of Manufacture	Control Devices
Kiln	200	125.0	1971	Baghouse & Cyclone

Electrical Generation Equipment

Equipment	Power Output (kW)	Fuel Type, % Sulfur	Maximum Firing Rate (gal/hr)	Stack #
Diesel G-3	650	Diesel fuel, 0.05%	50.0	2

C. Application Classification

The application for Blue Rock does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Asphalt Batch Plant

Blue Rock operates an asphalt batch plant for the production of asphalt at their Gray, Maine asphalt facility. The asphalt batch plant has a maximum designed heat input capacity of 125.0 MMBtu/hr and a maximum design process rate of 200 tons per hour. The asphalt batch plant was manufactured pre-1973, prior to the applicability date of June 1973 for EPA's New Source Performance Standards (NSPS), Subpart I, (Standards of Performance for Hot Mix Asphalt Facilities). The asphalt plant is currently permitted to fire #2 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight and specification waste oil with a sulfur content of no greater than 0.7% sulfur by weight. Blue Rock is currently licensed to burn no greater than a total 400,000 gallons, based on a twelve-month rolling total, of a combination of #2 fuel oil and specification waste oil per year in the asphalt plant kiln. In order to demonstrate compliance with fuel restrictions, Blue Rock shall maintain a record of fuel use for the asphalt batch plant, which shall include fuel purchase receipts indicating the quantity and sulfur content of the purchased fuel.

To meet requirements of BPT, the asphalt batch plant vents to a baghouse. The performance of the baghouse shall be constantly monitored by either of the following at all times the batch plant is in operation:

1. PM Detector – when the detector signals excessive PM concentrations in the exhaust stream, Blue Rock shall take corrective action within 24 hours, or immediately if opacity exceeds 20% based on a 6-minute block average basis.

2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt batch plant is operating with insufficient control and Blue Rock shall take corrective action immediately.

Within 12-months of the signing of this license, Blue Rock shall establish a system of maintenance, inspection and repair for the asphalt batch plant baghouse, which shall allow for periodic inspection of the system. Blue Rock shall document compliance by means of a maintenance, inspection and repair log in which Blue Rock shall record the date of all bag failures and all routine maintenance as well as all inspection dates and findings.

A summary of the BPT analysis for the Asphalt Plant is as follows.

1. BPT for PM is emissions not to exceed 0.03 gr/dscf. PM₁₀ emission limits are based on PM limits.
2. For the use of #2 fuel oil, BPT is a sulfur content not to exceed 0.5% sulfur by weight and for the use of specification waste oil, BPT is a sulfur content not to exceed 0.7% sulfur by weight.
3. NO_x, CO and VOC emission limits are based upon AP-42 data dated 12/00 for #2 fuel.
4. Visible Emissions for the Asphalt Batch Plant baghouse is limited to no greater than 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period

C. Diesel Generator Unit

Blue Rock utilizes a diesel generator set, designated Diesel G-3, primarily as a power source for the asphalt batch plant. BPT for the diesel unit shall be a total annual fuel use limit of 50,000 gallons of diesel fuel oil at 0.05% sulfur by weight based on a 12-month rolling total. To demonstrate compliance with the fuel restrictions, Blue Rock shall maintain a record of fuel oil purchases, which shall include receipts indicating the amount of fuel delivered and the sulfur content of the purchased fuel.

A summary of the BPT analysis is as follows

1. BPT for PM for the diesel unit is 0.12 lb/MMBtu. PM₁₀ emission limits are based on PM limits.
2. BPT is a sulfur content not to exceed 0.05% sulfur by weight
3. NO_x, CO and VOC emission limits are based on AP-42 data dated 10/96.
4. Visible emissions from the diesel generator unit shall not exceed 30% opacity on a 6-minute block average except, for no more than two 6-minute block averages in a 3-hour period.

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D. Fugitive Emissions

Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour.

E. Annual Emission Restrictions

Blue Rock shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	2.1
PM ₁₀	2.1
SO ₂	19.9
NO _x	16.3
CO	20.8
VOC	0.7

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Based on the total facility emissions, Blue Rock is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

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The Department hereby grants Air Emission License A-243-71-H-R subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.

- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

SPECIFIC CONDITIONS

(16) Asphalt Batch Plant

- A. The asphalt batch plant dryer shall be limited to a maximum of 125.0 MMBtu/hr heat input. [MEDEP Chapter 115, BPT]
- B. Total fuel use in the asphalt batch plant shall not exceed 400,000 gal/year of a combination of #2 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight and specification waste oil with a sulfur content of no greater than 0.7% sulfur by weight, based on a 12 month rolling total. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Fuel use records shall be maintained on a monthly basis, in addition to the 12-month rolling total. [MEDEP Chapter 115, BPT]
- C. Blue Rock shall maintain fuel use records and receipts for the asphalt batch plant dryer for at least six years and the records shall be made available to the Department upon request. [MEDEP Chapter 115, BPT]
- D. Emissions from the asphalt batch plant shall vent to a baghouse and all components of the asphalt batch plant shall be maintained so as to prevent particulate matter leaks. [MEDEP Chapter 115, BPT]
- E. Visible Emissions for the Asphalt Batch Plant baghouse are limited to no greater than 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]
- F. The performance of the baghouse shall be constantly monitored by either of the following at all times the batch plant is in operation:
 - 1. PM Detector – when the detector signals excessive PM concentrations in the exhaust stream, Blue Rock shall take corrective action within 24 hours, or immediately if opacity exceeds 20% based on a 6-minute block average basis.
 - 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt batch plant is operating with insufficient control and Blue Rock shall take corrective action immediately.
[MEDEP Chapter 115, BPT]

- G. Fugitive particulate matter emissions from the asphalt batch plant operation shall be controlled so as to prevent visible emissions in excess of 10% opacity except for one 6-minute block average in any continuous 1-hour period. [MEDEP Chapter 101]
- H. Within 12-months of the signing of this license, Blue Rock shall establish a system of maintenance, inspection and repair for the asphalt batch plant baghouse, which shall allow for periodic inspection of the system. Blue Rock shall document compliance by means of a maintenance, inspection and repair log in which Blue Rock shall record the date of all bag failures and all routine maintenance as well as all inspection dates, findings and corrective actions. [MEDEP Chapter 115, BPT]
- I. Emissions from the asphalt batch plant shall not exceed the following:

Equipment		PM	PM₁₀	SO₂	NO_x	CO	VOC
Asphalt	Grs/dscf	0.03	-	-	-	-	-
Batch Plant	lb/hr	7.5	7.5	88.1	34.0	13.8	9.2

[MEDEP Chapter 115, BPT]

- J. Blue Rock shall not process more than 10,000 cubic yards of petroleum contaminated soils per year without prior approval from the Department. [MEDEP Chapter 115, BPT]
- K. Blue Rock shall only process soils contaminated with gasoline and/or #2 fuel oil without prior approval from the Department. [MEDEP Chapter 115, BPT]
- L. Blue Rock shall not process soils which are classified as hazardous waste or which have unknown contaminants. [MEDEP Chapter 115, BPT]
- M. When processing petroleum contaminated soils, Blue Rock shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Blue Rock shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [MEDEP Chapter 115, BPT]

(17) Diesel Generator Unit

A. Total fuel use for all diesel generator unit (Diesel G-3) shall not exceed 50,000 gal/year of diesel fuel with a maximum sulfur content of 0.05% by weight based on a 12 month rolling total. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. Fuel use records shall be maintained on a monthly basis, in addition to the 12-month rolling total. [MEDEP Chapter 115, BPT]

b. Emissions from Diesel G-2 shall be limited to the following:

Equipment		PM	PM₁₀	SO₂	NO_x	CO	VOC
Diesel G-3	lb/hr	0.8	0.8	3.4	21.2	5.6	0.6

[MEDEP Chapter 103]

c. Visible emissions from Diesel G-3 shall not exceed 30% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

(18) Fugitive Emissions

Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour. [MEDEP Chapter 101]

(19) Equipment Relocation [MEDEP Chapter 115, BPT]

a. Blue Rock shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

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- b. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
 - c. If less than 10 days is necessary for notification, contact the regional inspector by phone to notify of the upcoming relocation. This phone contact with the regional inspector shall be followed up with a written notice of relocation with the appropriate information.
- (20) Blue Rock shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [MEDEP Chapter 115]
- (21) Blue Rock shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 MRSA §605-C).
- (22) Blue Rock shall pay the annual air emission license fee within 30 days of December 31 of each year. Pursuant to 38 MRSA 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under 38 MRSA 341-D, Subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the signature above.

Date of initial receipt of application: **March 5, 2004**

Date of application acceptance: **March 16, 2004**

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality